

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

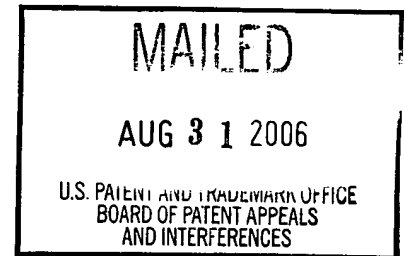
**UNITED STATES PATENT AND TRADEMARK OFFICE**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Ex parte SANDRINE DECOSTER, VERONIQUE DOUIN  
and VIRGINIE BAILLY

Appeal No. 2006-0756  
Application No. 09/692,749

HEARD: May 11, 2006



Before SCHEINER, GRIMES and GREEN, Administrative Patent Judges.

SCHEINER, Administrative Patent Judge.

**DECISION ON APPEAL**

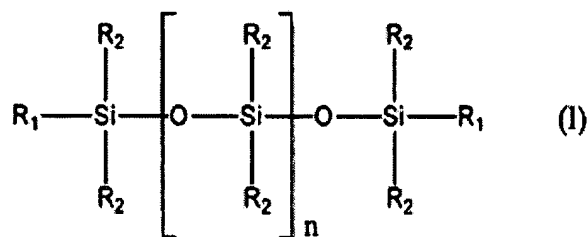
This present invention is directed to cosmetic compositions comprising at least one silicone copolymer having a defined formula and range of dynamic viscosity, at least one cationic surfactant, and at least one additional silicone, wherein the additional silicone is insoluble. The examiner has rejected the claims under 35 U.S.C. § 103 and under the doctrine of (provisional) obviousness-type double patenting.<sup>1</sup>

<sup>1</sup> The provisional double patenting rejection was maintained in the Final Rejection of May 19, 2004, and the Advisory Action of October 10, 2004, but not carried through to the Examiner's Answer. However, appellants list the rejection as an outstanding issue in ¶ VI of their Brief, and the examiner has indicated that appellants' statement of the issues in the Brief is correct (Examiner's Answer, page 2). Thus, the omission of the rejection from the Examiner's Answer appears to be an oversight, and we will treat it as an outstanding rejection.

Claim 1 represents the invention in its broadest aspect:

1. A cosmetic composition comprising, in a cosmetically acceptable medium,
- (1) at least one silicone copolymer with a dynamic viscosity ranging from  $1 \times 10^6$  to  $100 \times 10^6$  cP, resulting from the addition reaction, in the presence of a catalyst, of:

- (a) at least one polysiloxane of formula (I);



in which;

- $\text{R}_1$ , which may be identical or different, are independently chosen from groups that can react by chain addition reaction,
- $\text{R}_2$  in formula (I), which may be identical or different, are independently chosen from alkyl, alkenyl, cycloalkyl, aryl, hydroxyl, and alkylaryl groups, optionally comprising at least one functional group,
- $n$  is an integer wherein the polysiloxane of formula (I) has a kinematic viscosity ranging from 1 to  $1 \times 10^6$  mm<sup>2</sup>/s; and
- (b) at least one silicone compound comprising at least one and not more than two groups capable of reacting with the groups  $\text{R}_1$  of the polysiloxane (a), wherein:
  - at least one of the compounds of type (a) and (b) comprises an aliphatic group comprising an ethylenic unsaturation,

- (2) at least one additional silicone, and

- (3) at least one cationic surfactant.

wherein the at least one additional silicone comprises an insoluble silicone.

An example of a silicone copolymer meeting the limitations of claim 1 is an  $\alpha,\omega$ -divinyldimethicone/ $\alpha,\omega$ -dihydrogenodimethicone copolymer with a dynamic viscosity of

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about  $15 \times 10^6$  cP. Specification, page 5, line 22 to page 6, line 4. The “at least one additional silicone” may be a volatile or non-volatile polyorganosiloxane in the form of an oil, wax, resin or gum. Id., page 6, lines 12-16. Numerous specific examples of suitable “additional” silicones are provided on pages 12-16 of the specification. There is no dispute on this record that the term “insoluble” in the claims means insoluble in water, or that the various “additional” silicones listed in the specification are water-insoluble.

The references relied on by the examiner are:

Grollier et al. (Grollier I)	4,957,732	Sep. 18, 1900
Grollier et al. (Grollier II)	5,063,051	Nov. 5, 1991
Dubief et al. (Dubief I)	5,650,383	Jul. 22, 1997
Inman	5,948,739	Sep. 7, 1999
Dubief et al. (Dubief II)	6,011,126	Jan. 4, 2000
Restle et al. (Restle)	6,039,936	Mar. 21, 2000
Dalle et al. (Dalle) (published European Patent Application)	EP 0 874 017 A2	Oct. 28, 1998

The claims stand rejected as follows:

- Claims 1-31, 38-67 and 94-112 under 35 U.S.C. § 103 as unpatentable over Dalle, Dubief I and Restle.
- Claim 32 under 35 U.S.C. § 103 as unpatentable over Dalle, Dubief I, Restle and Grollier II.
- Claim 33 under 35 U.S.C. § 103 as unpatentable over Dalle, Dubief I, Restle, Grollier II and Grollier I.
- Claims 34-37 under 35 U.S.C. § 103 as unpatentable over Dalle, Dubief I, Restle, Grollier II, Grollier I and Dubief II.
- Claims 68-93 under 35 U.S.C. § 103 as unpatentable over Dalle, Dubief I, Restle, Grollier II, Grollier I, Dubief II and Inman.
- Claims 1-14 and 41-104, provisionally, under the doctrine of obviousness-type double patenting.

OPINION

Obviousness

The examiner's proposed combination of the teachings of Dalle and Dubief I forms the basis for each of the rejections under 35 U.S.C. § 103, so we will discuss all five of the obviousness rejections together.

Dalle describes a "process of making silicone in water emulsions in which silicones polymerize by chain extension at the interior of a silicone droplet suspended in water." Dalle, page 2, lines 4-5. The process involves "mixing materials comprising (I) a composition containing at least one polysiloxane, at least one organosilicon material that reacts with said polysiloxane by a chain extension reaction and a metal containing catalyst for said chain extension reaction, (II) at least one surfactant and (III) water to form a mixture; and emulsifying the mixture." Id., lines 30-33. The specific components of Dalle's silicone copolymers are described on pages 3 and 4, and there is no dispute on the record that Dalle's emulsions contain copolymers that are the same as those required by the instant claims, and have the requisite dynamic viscosities.

Dalle teaches that "other materials can be added to either phase of the emulsions. For example, materials which assist in the chain extension reaction [ ], conventional inhibitors, perfumes, colorants, thickeners, preservatives, plasticizers, active ingredients (e.g., pharmaceuticals) and the like" (id., page 4, line 57 to page 5, line 1). According to Dalle, "[t]he emulsions . . . are useful in the standard applications for silicone emulsions" (id., page 5, line 47), such as "hair shampoos, [and] hair conditioners . . . to provide conditioning benefits" (id., lines 51-53), and are "likewise

useful as a delivery system for oil and water soluble substances such as vitamins, organic sunscreens, ceramides, pharmaceuticals and the like” (id., lines 54-55).

Dubief I describes “compositions for washing and/or conditioning . . . hair” (Dubief I, column 1, lines 10-12) which “contain, in an aqueous medium: at least one surface-active agent possessing detergent properties; at least one silicone which is insoluble in this medium; and at least one [amphoteric] copolymer [derived from] diallyldialkylammonium and [ ] an anionic monomer” (id., lines 61-67). The silicones used in the composition are volatile or non-volatile “polyorganosiloxanes which are insoluble in aqueous media, [and] may take the form of oils, waxes, gums, or resins” (id., column 2, line 66 to column 3, line 10). Suitable polyorganosiloxanes are listed in columns 3-6, and there is no dispute on the record that these insoluble silicones are the same as the “additional” insoluble silicones required by the instant claims.

According to Dubief, compositions containing polyorganosiloxanes and an amphoteric copolymer derived from diallyldialkylammonium and an anionic monomer have “excellent disentangling and softness properties when compared with . . . compositions containing only the silicone or the amphoteric polymer by itself” (id., column 1, lines 31-39). Dubief I teaches that the compositions “may optionally also contain other agents whose effect is to improve the . . . cosmetic properties of hair, on condition that they do not impair the stability of the compositions, such as cationic surface-active agents, polymers other than the copolymers of diallyldialkylammonium and [ ] an anionic monomer or proteins or else silicones which are soluble in the mixture” (id., column 7, lines 56-63).

The examiner acknowledges that Dalle “fails to teach additionally using the insoluble silicones [ ] recited in the instant claims” (Examiner’s Answer, page 4), but argues that “it would have been obvious to one of ordinary skill in the art . . . to have modified the composition of Dalle by adding an additional silicone disclosed in Dubief [I]” (id., page 5), “because of the expectation to have successfully produced [a] hair care composition that enhances shine, softness, lightness and disentanglement of hair” (id.). According to the examiner “[a]ll components are known in the art” and “[n]othing unexpected or nonobvious is seen in combining old and well-known compounds for the same use” (id.).

We disagree. At best, the evidence relied on by the examiner establishes that individual parts of the claimed invention were known in the prior art. As explained in In re Kotzab, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000) (citations omitted):

Most if not all inventions arise from a combination of old elements . . . However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.

In our view, the fact that both Dalle and Dubief I concern silicone-containing shampoos and conditioners, without more, would not have been enough to lead one skilled in the art to add the water-insoluble polyorganosiloxanes of Dubief I to Dalle’s emulsions as a distinct component (i.e., not as a monomeric building block of the silicone copolymer). While Dalle teaches that other materials can be added to either phase of the emulsion, no additional silicones (of any kind) are among the suggested

materials. On the other hand, Dubief I does suggest that "silicones which are soluble in the mixture" (Dubief I, column 7, line 63) can be added to the compositions, but the phrase "soluble in the mixture" is ambiguous at best. Moreover, there is at least some indication that "soluble in the mixture" means soluble in aqueous media or water-soluble, because the polyorganosiloxanes that are the <sup>principal</sup> ~~principle~~ component of Dubief I's compositions are invariably described as "insoluble in the medium" (Dubief I, column 1, line 61-64), meaning "insoluble in aqueous media" (id., line bridging columns 2 and 3), or "water-insoluble" (id., column 6, line 5).

We agree with appellants that Dubief I is merely "cumulative of Dalle, and [ ] not a teaching that cures the deficiencies of Dalle" (Appeal Brief, page 12). On this record, the examiner has not identified a reason or suggestion, stemming from the evidence cited, to combine Dalle and Dubief I in the manner claimed.

Nor has the examiner identified anything in the secondary prior art references that cures the underlying deficiency in the examiner's proposed combination of Dalle and Dubief I. Restle was cited as evidence that quaternary ammonium salts were conventional components of silicone-containing hair care compositions. Grollier I and Grollier II were cited as evidence that the particular polyorganopolysiloxanes required by instant claims 32 and 33 were conventional components of hair care compositions. Similarly, Dubief II was cited as evidence that grafted silicone copolymers, required by claims 34-37, were conventional components of hair care compositions. Finally, Inman was cited as evidence that the various anionic, amphoteric, zwitterionic and non-ionic surfactants required by claims 68-93 were all known components of shampoos.

“[T]he examiner bears the initial burden of presenting a prima facie case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant.” In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). “It is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.” In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) (citation omitted). The examiner may establish a case of prima facie obviousness based on a combination of references “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” Id. at 1265, 23 USPQ2d at 1783. On this record, the examiner has not done so.<sup>2</sup> Accordingly, the rejections of the claims under 35 U.S.C. § 103 are reversed.

#### Obviousness-Type Double Patenting

The examiner provisionally rejected claims 1-14 and 41-104 under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-83 of co-pending application serial no. 09/692,360; claims 1-95 of co-pending application serial no. 09/692,155; and claims 1-16 and 37-104 of co-pending application serial no. 09/692,716. See the Final Rejection of May 19, 2004, and the Advisory Action of October 10, 2004.

Appellants do not dispute the merits of the examiner’s double patenting rejection, and indicate that a terminal disclaimer will be filed when and if “the standing double

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<sup>2</sup> Because we hold that the examiner has not established a prime facie case of obviousness, we find it unnecessary to discuss the declaration of Véronique Mahe, submitted March 8, 2005, under the provisions of 37 CFR § 1.132.



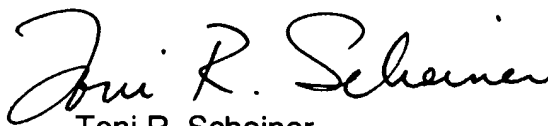
patenting rejections are the final barrier for claim allowance.” Appeal Brief, page 8.  
Thus, we affirm the provisional rejection as it applies to co-pending application serial no.  
09/692,360. The provisional rejection is moot as it applies to application serial nos.  
09/692,155 and 09/692,716, as these applications have been abandoned.

Summary

We affirm the examiner's provisional rejection of claims 1-14 and 41-104 for  
obviousness-type double patenting, but reverse all of the other rejections on appeal.

No time period for taking any subsequent action in connection with this appeal  
may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART



Toni R. Scheiner  
Administrative Patent Judge



Eric Grimes  
Administrative Patent Judge



Lora M. Green  
Administrative Patent Judge

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